U.S. Patent Application No. 09/736,820
Request for Reconsideration dated June 23, 2004
Reply to Office Action dated March 24, 2004

REMARKS/ARGUMENTS

Reconsideration and continued examination of the above-identified application are respectfully requested.

At page 2 of the Office Action, the Examiner maintains the rejection of claims 1, 5, 6, 19, 22, and 23 under 35 U.S.C. §102(b) as being anticipated by Bosco (U.S. Patent No. 3,808,032). The Examiner asserts that claims 1, 5, 6, 19, 22, and 23 are rejected for the reasons set forth in the Office Action dated August 25, 2003.

For the following reasons, this rejection is respectfully traversed.

Claim 1 of the present application recites a floor surface covering including two or more polymeric flooring planks having edges, wherein the planks are connected to each other by a bonding agent, wherein the bonding agent is present on at least one of the edges of at least one of the planks, and wherein the bonding agent includes at least one solvent that at least bonds the edges of the planks. Furthermore, claim 19 of the present application recites, in part, that the floor surface covering includes at least one solvent that bonds together at least one spline and plank, wherein the bonding agent is applied to at least one of the edges of at least one of the individual planks, splines, or both.

The present application clearly defines the term "bonding agent" which includes "at least one solvent" as:

> With respect to the bonding agent or composition, the bonding agent or composition contains a compound capable of dissolving the thermoplastic material forming the core of the plank. Also, if a spline is used, the spline material can be chosen to interact with the bonding agent so that the edges of the core of the plank and spline are all welded together into a joint. These compounds are typically considered solvents. Preferred examples of the

> solvents include, but are not limited to, tetrahydrafuran (THF), cyclohexanone, methylene chloride, dimethyl formamide, toluene, acetone, ethylene dichloride, methyl ethyl ketone, n-methyl pyrrolidone, methyl isobutyl ketone, dipropyl ketone, isophorone, methyl amyl ketone, nitrobenzene, methyl cyclohexanone, and acetonyl acetone. Preferably, the solvent is tetrahydrafuran or a methyl alkyl ketone or an alkyl alkyl ketone. Mixtures of two or more solvents can be used to form the bonding agent or composition. For instance, tetrahydrafuran and methyl alkyl ketone can be used as a mixture in any ratio.

(See page 6, lines 21-32 of the present application - emphasis added)

Thus, the term is clearly defined and a bonding agent is not any glue.

Although Bosco describes fastening the planks together, such as by edge-bonding (gluing), Bosco does not teach or suggest a bonding agent that includes at least one solvent. The Examiner is simply mistaken on this point. Bosco, at column 3, line 8, only mentions glue, and not bonding by the use of solvents. Glues and solvents are not the same.

Furthermore, with respect to the Examiner's argument that a solvent in the bonding agent of the claimed invention would dissolve another substance in the bonding agent, thereby leaving the bonding agent to bond the edges of the planks, the Examiner does not have a clear understanding and appreciation of the claimed invention.

As stated above, claim 1 of the present application recites, in part, that the bonding agent includes at least one solvent that at least bonds the edges of the planks. Therefore, it is the solvent in the bonding agent that promotes the bonding or welding of and/or bonds the edges of the planks. Therefore, in contrast to the Examiner's conclusion, the solvent in the bonding agent of the claimed invention does not dissolve another substance in the bonding agent, thereby leaving the active agent (e.g., glue). In other words, the solvent of the claimed invention is not a carrier of the bonding agent, but is, itself, the bonding agent. Thus, the Examiner's statement that

the glue in Bosco would inherently contain a solvent, such as water, wherein the end product of the bonding agent is glue, does not make the glue of Bosco the same as or equivalent to the "bonding agent" of the claimed invention. The water in the glue of Bosco is a carrier and is not the bonding agent.

With respect to the Examiner's argument that the statement "the bonding agent or composition contains a compound capable of dissolving the thermoplastic material forming the core of the plank" is not a structural limitation, in the Request for Reconsideration dated November 20, 2003, the applicants simply referred to page 6, lines 21-23 of the present application, which states that the bonding agent or composition contains a compound capable of dissolving the thermoplastic material forming the core of the plank, to illustrate to the Examiner that the solvent of the claimed invention is the bonding agent and is not simply a carrier of the bonding agent, as presumed by the Examiner. If the Examiner would like this language added to claim 1 to assist the Examiner's understanding, the applicant can do so if it will result in an allowance of the claims. As such, Bosco does not teach the claimed invention.

Further, Bosco relates to a process for imparting long lasting gloss and color depth properties to wood-plastic composites comprising sanding, applying a small amount of drying or semi-drying oil to the surface, and buffing. According to Bosco, the wood-plastic composite includes individual surface wood fibers coated with a composition so as to impart permanent high gloss, water spotting resistance, and stain resistance to the surface of the composite. *See* Example 1 of Bosco, wherein the wood-plastic composite is 75% by weight wood. Also, contrary to the Examiner, Bosco does not show a laminate on a plank. A coating is discussed. This is not a

laminate. Column 3 of Bosco describes various means for fastening planks together, such as edge-bonding (gluing), adhering them to a common backing, or mechanical fastener means. Furthermore, Bosco describes that fastening may be performed by embedding splined wires across the fillets spanning the width of a tile, preferably cutting off the ends of the wire and locking the wire in place in a punching operation to form a 6 inch by 6 inch floor tile. Alternatively, Bosco states that edges may include variations on tongue-and-groove interlocking configurations.

With respect to the Examiner's argument that a coating can be a laminate, one skilled in the art would clearly understand and appreciate the differences between a coating and a laminate, and that a coating is not and cannot be a laminate.

A surface coating is best defined as a substance applied to other materials to change the surface properties, such as color; gloss; resistance to wear, chemical attack, or permeability; without changing the bulk properties. The term includes such materials as paints, varnishes, enamels, oils, greases, waxes, etc. In general, organic coatings are based on a vehicle, usually an oil or resin, which, after being spread out in a relatively thin film, changes to a solid.

A laminate is best defined as a composite made of any one of several types of plastics (phenolic, polyester, epoxy, or silicone) bonded to materials such as paper, cloth, asbestos, wood, or glass fiber. High tensile and dielectric strength and low moisture absorbency are characteristic of these products. In general, a laminate requires a substance (e.g., an adhesive) to bond the laminate layer to the material. However, a coating generally does not require a third substance (e.g., an adhesive) to bond the coating to the material. These substantial differences are well

known to one skilled in the art. Therefore, one skilled in the art would not conclude that a coating can be a laminate.

The wood-plastic pieces described in Bosco are not the polymeric flooring planks of the claimed invention. One skilled in the art, by reading Bosco, would conclude that the wood, present in a very high percentage, is impregnated wood board, which is different from the polymeric flooring planks of the claimed invention. Accordingly, this rejection should be withdrawn.

At page 2 of the Office Action, the Examiner also maintains the rejection of claims 2-4, 20, and 27 under 35 U.S.C. §103(a) as being unpatentable over Bosco, in view of Peralt Anstalt (GB 1,178,565). The Examiner states that the reasons set forth in the Office Action dated August 25, 2003 for rejecting claims 2-4, 20, and 27 are incorporated herein.

For the following reasons, this rejection is respectfully traversed.

The comments set forth above with respect to Bosco apply equally here. Peralt Anstalt shows a different product that is joined together in a completely different manner. Peralt Anstalt is directed to exterior panels that are used in roofing applications, and the term "overlapping" appears in the text (page 1, lines 16-19) and in the claims. Such a configuration would be typified by the overlapping of shingles on a roof, or clapboard on a house, and this configuration is confirmed by reference to the Figures. Such an overlapping configuration would be essential to ensure a watertight seal in outdoor applications, such as the roofs mentioned in the specification of Peralt Anstalt.

In contrast, the planks of the claimed invention are designed preferably for floors. In such applications, the joining would be edge to edge, with no overlap of any kind, to produce a

substantially flat surface. The claimed invention does not encompass the overlapping configuration found in Peralt Anstalt. The claimed invention relates to floor surface covering and the claims specifically recite the bonding agent being applied to the "edges" of the planks, as in claim 1. Furthermore, one skilled in the art would not overlap a floor surface covering.

The Examiner is misreading the plain meaning of the language and disregarding the diagrams of Peralt Anstalt. Several parts of the reference make it clear that the bonding of Peralt Anstalt is overlapping, rather than edge-to-edge.

Additionally, the Examiner refers to column 1, lines 30 and 31 of Peralt Anstalt, which quotes a welding agent. However, the agent in Peralt Anstalt is not used in an edge-to-edge joining, but in an overlapping connection that would not be used in flooring. In the claimed invention, the solvent is applied to the edges of the planks, not to their top or bottom faces, so as to avoid producing an overlapping structure. In fact, one skilled in the art of flooring would not look to the overlapping configuration. From the above, it is clear that Peralt Anstalt does not teach or suggest the claimed invention.

With respect to the Examiner's argument that Peralt Anstalt describes bonding edges together, the Examiner is completely ignoring the fact that the claimed invention relates to a floor surface covering, whereas Peralt Anstalt relates to exterior panels that are used in roofing applications and are configured by the overlapping of shingles on a roof, or clapboard on a house. Clearly, one skilled in the art would not look to overlapping panels that can create a tripping hazard, as described in Peralt Anstalt, when dealing with a floor surface covering.

Furthermore, in the Office Action dated February 25, 2002 (paper #4, page 5, paragraph 4), the Examiner admitted that Peralt Anstalt fails to teach or suggest that the bonding agent includes at least two different solvents capable of at least bonding the edges of the polymeric portion of the plank. In fact, in the present Office Action, the Examiner acknowledges that Peralt Anstalt states that the bonding agent consists essentially of tetrahydrofuran. The use of the term "consisting essentially of" only allows inclusion of other components, ingredients, or process steps that do not materially affect the basic and novel characteristics of the invention. Thus, one skilled in the art, by reading Peralt Anstalt, would not conclude that the bonding agent can include other bonding agents in addition to tetrahydrofuran.

With respect to the Examiner's argument that the combination of Bosco and Peralt Anstalt form two different solvents capable of at least bonding the edges of the polymeric portion of the planks, it is important for the Examiner to appreciate that the water in Bosco is not a solvent capable of bonding two or more polymeric planks together. Therefore, the combination of the two references does not teach or suggest a bonding agent that includes at least two different solvents capable of at least bonding the edges of the polymeric portion of the plank. As stated above, the water in Bosco is the carrier of the glue. Water is not a solvent capable of bonding the edges of the polymeric portion of the planks. Additionally, Peralt Anstalt teaches away from glue, by stating, at page 1, lines 22-30, that "[a] welding solvent distinguishes itself from a normal adhesive by the fact that it completely evaporates after connection of the two sheet[sic] and that the connection between these sheets is obtained solely by temporarily dissolving and, respectively, plasticizing the plastic material so that a connection similar to a

welded connection is obtained under pressure." Thus, one skilled in the art would not be motivated to combine the glue of Bosco, which is very different from a welding solvent, with the tetrahydrofuran of Peralt Anstalt. Even if the two references were combinable, the combination of the two does not necessarily form a workable bonding agent or a bonding agent that includes at least two different solvents capable of at least bonding the edges of the polymeric portion of the plank.

Given that Peralt Anstalt is directed to exterior panels that are used in roofing applications, one skilled in the art would not conclude that Peralt Anstalt can be substituted for the glue of Bosco or that Peralt Anstalt and Bosco can be combined. Peralt Anstalt is non-analogous art since it relates to roofing tiles. One skilled in the art in flooring is not going to look to roofing tile technology for guidance or motivation. Further, one skilled in the art would not substitute basic glue (in Bosco) for a welding agent in Peralt Anstalt, especially since the material of Bosco is different from the roofing tiles of Peralt Anstalt. Accordingly, this rejection should be withdrawn.

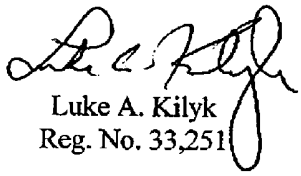
If there are any questions, the Examiner is encouraged to contact the undersigned by telephone.

CONCLUSION

In view of the foregoing remarks, the applicants respectfully request reconsideration of this application and the timely allowance of the pending claims.

If there are any other fees due in connection with the filing of this response, please charge the fees to Deposit Account No. 50-0925. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such extension is requested and should also be charged to said Deposit Account.

Respectfully submitted,



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